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**COVER SHEET**

1. Specify:      ☐ Agricultural Project                      ☒ Individual Application  
                    ☒ Urban Project    ☐ Joint Application
2. Proposal Title:                      **Rebates for Ultra-Low-Flush Toilets and High Efficiency Coin/Card Operated Clothes Washers**
3. Principal Applicant:              **City of Los Angeles Department of Water and Power**
4. Contact Name:                      Mr. Thomas Gackstetter
5. Mailing Address:                      Los Angeles Department of Water and Power  
   111 North Hope Street, Room 1463  
   Los Angeles, CA 90012
6. Telephone:                              (213) 367-0936
7. Fax:                                        (213) 367-1055
8. E-mail:                                  Thomas.Gackstetter@Water.Ladwp.com
9. Funds Requested:                      \$415,000
10. Applicant cost-share funds pledged: \$1,200,000
11. Duration – (month/year) to (month/year):                      Date funded to June 30, 2003
- 12: State Assembly and Senate districts and Congressional district(s) where the project is to be conducted:                      Congressional Districts 24, 26, 29-30, 33, and 35  
   Senate Districts 19-28  
   Assembly Districts 38-49, 51-52, and 55
13. Location and geographic boundaries of project: City of Los Angeles
14. Name and signature of official representing applicant. By signing below, the applicant declares the following:
- the truthfulness of all representations in the proposal;
  - the individual signing the form is authorized to submit the application on behalf of the applicant;
  - the applicant will comply with contract terms and conditions identified in Section 11 of this PSP.

\_\_\_\_\_  
Thomas L. Gackstetter  
(printed name of applicant)

\_\_\_\_\_  
February 14, 2001  
(date)

\_\_\_\_\_  
(signature of applicant)



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**SCOPE OF WORK**

**Executive Summary:** Relevance and Importance

Water conservation in Los Angeles is as much a necessity today as it was when the first water meters were installed in the early 1900's. Now, with over 3.8 million people residing in the Los Angeles Department of Water and Power's service area, we are presented with yet another defining opportunity to build upon our water conservation accomplishments. Funding through CALFED's Water Use Efficiency Program would enable the City of Los Angeles Department of Water and Power (Department) to expand our proven incentive programs for our large population of commercial, industrial and institutional customers. We are confident that increased rebate levels for the installation of ultra-low-flush toilets (ULFTs) and high efficiency coin/card operated clothes washers will encourage and accelerate the purchase and installation of these water saving appliances. With CALFED's support, the City of Los Angeles will continue to lead the way in implementing cost effective demand-reduction programs well into the 21<sup>st</sup> century.

Our responsibility is straightforward. The Department must provide a safe, reliable, and affordable water supply for a growing urban population and commerce base in an arid region of the state. This has meant increased demands for imported water supplies, including that from the San Francisco-San Joaquin Bay Delta. Therefore, encouraging participation in citywide demand-reduction programs can improve water supply reliability to meet future needs; thus generating real water savings while reducing diversions and providing secondary benefits to the environment. This increased need for urban conservation measures is outlined in the Memorandum of Understanding Regarding Urban Water Conservation in California (Urban MOU). Included among the revised Best Management Practices in the Urban MOU is the requirement for conservation programs for commercial, industrial, and institutional (CII) customers (BMP No. 9). Offering higher rebates to CII customers for the installation of ULFTs and high efficiency clothes washers would be a simple yet significant step forward in the Department's ongoing acquisition of conserved water resources.

The objective of demand reduction is achievable. The Department's incentive-based water conservation programs for residential customers have gained national recognition. Over \$90 million has been invested in conservation programs over the last 10 years, resulting in estimated water savings of over 32,000 acre-feet per year. CALFED funding represents an opportunity to expand a similar program for CII customers in the City of Los Angeles. To illustrate, the California Urban Water Conservation Council has recently completed studies that developed census numbers for non-ULFTs within Los Angeles and water savings estimates attributable to toilet replacement in each of 12 CII sectors. Los Angeles' CII market potential currently comprises over 260,000 toilets having an estimated savings potential of over 20 acre-feet per day.



Coin/card operated clothes washers are found in laundromats and multifamily common area laundry rooms. Virtually all of the clothes washers found in laundromats are purchased, while 80 percent of the machines found in multifamily facilities are leased through “Route Operators”. Los Angeles has an estimated 600 laundromats, each having an average of 40 clothes washers. In addition, there are approximately 30,000 clothes washers in multifamily common area laundry rooms. Using typical industry rate of use numbers, replacement of conventional washers with high efficiency models represents a savings potential of 8.6 acre-feet per day.

While the potential for savings is great, a number of hurdles exist that must be overcome. First, the costs for CII toilet replacement do not compare favorably with those in the residential sector. The City’s plumbing code requires application for a plumbing permit when replacing a toilet in a CII facility, labor costs are incurred for the services of a licensed plumber, and commercial-grade fixtures are more costly than residential counterparts. Second, the selection and purchase of clothes washers is based largely on the criterion of first cost, regardless of whether the purchase is made by a laundromat owner or the Route Operator. Research has shown an incremental cost of \$300 - \$350 for bulk purchase of high efficiency model clothes washers over standard models. Incremental costs can be as high as \$500 for smaller volume purchases. Rebates that address these higher customer costs will result in immediate and sustainable water savings through increased program participation. The Department’s application for CALFED funding for CII toilets and clothes washers is predicated on this premise.

### Technical/Scientific Merit, Feasibility, Monitoring, and Assessment

Rebate programs are the backbone of the collective water conservation effort in California. The Department’s decade-long worth of experience with water conservation programmatic efforts in the residential sector will provide a strong foundation for an expanded program in the largely untapped CII sectors. This particular customer base represents some of the largest volume of water users in our service area—which is precisely why efforts are being made to provide financial incentives that would offer sound economic justification for water use efficiency program participation.

The Department is one of many member agencies participating in the Metropolitan Water District of Southern California’s (MWD) region-wide CII water conservation program. An experienced contractor has already been selected and hired to administer the program, which is currently operational. CALFED funding would be used to increase rebate levels for specific ULFTs and qualified models of washers purchased and installed within the City of Los Angeles. Though the Department fully supports the



MWD program, CALFED funding could be shifted to the Department's own rebate program in the event that MWD reduces or eliminates programmatic support or shortens the implementation horizon. However, this scenario is highly unlikely given MWD's demonstrated program commitments, including established contracts with the member agencies and program contractor.

The Department fully supports this program. We participated in its development, signed on as a participant, committed additional funding for increased ULFT rebates and program marketing, and are now referring eligible customers from our own rebate program. This is being done to enhance participation and minimize competition between the two programs. The capacity, facilities and procedures, including customer and trade ally outreach, are already in place to enhance program participation. With funding through CALFED, the Department expects, over time, to realize an equally impressive reduction in water consumption by our CII customer base as has been demonstrated by our residential sector.

Program implementation is now underway. Application of CALFED funding would be immediate. The existing contract between the Department and MWD has been structured to render changes in rebate levels in an expeditious fashion.

Monitoring and assessment of the impacts of increased rebate levels is straightforward. MWD and their program contractor will conduct monitoring through regular activity reporting to the Department. Assessment of the impacts of higher rebate levels will be made using comparisons of program participation rates between MWD's program in the Department's service territory, MWD's program (at lower rebate levels) in similar territories of other participating member agencies, and historical participation rates in the Department's long-running rebate program. Water savings impacts will be derived from program participant data (e.g. customer type, number of fixtures installed) using industry-accepted water savings estimates for specific devices.

No costs will be incurred to implement increased rebate levels. All CALFED funding will be applied directly to increased device rebates.

Program data for Los Angeles will be made available in comparison format (to other participating agencies) on a quarterly basis.



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## **OUTREACH, COMMUNITY INVOLVEMENT, AND INFORMATION TRANSFER**

Outreach efforts will be key for the program's success. Experience has taught us that community-based organizations provide a vital link to the diverse communities of Los Angeles. In fact, the Department has established cooperative working relationships with six community-based organizations for the distribution of residential ULFTs throughout the City. It is anticipated that with additional funding for rebates to the Department's commercial and industrial customer base, these and other organizations can assist the Department in reaching small business owners—particularly those in disadvantaged communities. After all, these customers stand to benefit the most from installing more water-efficient equipment by means of reduced energy and water bills. Offering higher rebates therefore benefits the City of Los Angeles economically while reducing demand for additional water in the future.

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## **QUALIFICATIONS OF THE APPLICANTS, COOPERATORS, AND ESTABLISHMENT OF PARTNERSHIPS**

The Region-wide Commercial Fixture Retrofit Program represents a cooperative effort by the Department, MWD and the United States Bureau of Reclamation. The Department has a decade-long track record of implementing cost-effective, water saving programs, and is investing financial resources, marketing and in-kind contributions to this program. MWD, the regional water wholesaler, also has extensive conservation program implementation experience. MWD staff was responsible for conceptual development of the program, conducted a competitive bid process that resulted in the hiring of the program contractor, and is coordinating the implementation of the program among its participating member agencies. The United States Bureau of Reclamation is a staunch supporter of urban water conservation and plays an active role in supporting conservation efforts at the state and local levels.

Please note that the project manager's resume is attached at the end of this document.



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**COSTS AND BENEFITS**

This application requests CALFED funding in the amount of \$415,000 for program rebates over two years. Programmatic efforts undertaken with CALFED funding will target customer segments offering the greatest potential for water savings. The Department will also invest up to \$1.2 million, in addition to in-kind services, over the same two-year implementation horizon. CALFED's investment is projected to yield water savings at a cost of \$128 per acre-foot.

Department cost sharing in addition to the rebate contributions shown below will include \$50,000 expended annually to market the program specifically to those customer sectors representing the higher water savings potential, as well as provision of in-kind services of Department staff for data analysis, program reporting and programmatic customer service. It should be noted that rebate levels would be maintained across both customer categories in the interest of customer equity in the program.

The Department's past programmatic experience has shown that customers are least likely to replace flushometer-type toilets due to the complexity of the task and level of professional expertise required for fixture replacement. Properly installed and adjusted flushometer-type ULFTs will generate reliable long-term water savings and are therefore targeted in this proposal.

**REBATE CONTRIBUTORS**

<u>Fixture Type</u>	<u>Department</u>	<u>MWD</u>	<u>USBR</u>	<u>CALFED</u>	<u>Total Rebate</u>
ULFT - Cat. 1 Flushometer	\$0.00	\$60.00	\$60.00	\$130.00	\$250.00
ULFT – Cat. 2 Flushometer	\$60.00	\$60.00	\$0.00	\$130.00	\$250.00
ULFT - Cat. 1 Tank type	\$30.00	\$60.00	\$30.00	\$0.00	\$120.00
ULFT - Cat. 2 Tank Type	\$60.00	\$60.00	\$0.00	\$0.00	\$120.00
High Efficiency Clothes Washer	\$0.00	\$100.00	\$150.00	\$200.00	\$450.00

*Category 1 – Installed in restaurants, food (grocery) stores, wholesale establishments (distribution centers, warehouses)*  
*Category 2 – Installed in non-Category 1 facilities*



Two-year programmatic goals and projected savings for installation of devices funded by CALFED are as follows:

<u>Device</u>	<u>Number of Devices</u>	<u>Savings (GPD)</u>	<u>Annual Savings (AF)</u>	<u>Lifetime Savings (AF)</u>	<u>CALFED Funding</u>	<u>CALFED Funding (AF)</u>
ULFT – Cat.1 Flushometer	1,500	76,050	85.2	2,129.70	\$195,000	\$91.56
ULFT – Cat.2 Flushometer	1,000	24,600	27.6	688.9	\$130,000	\$188.71
HE Clothes Washer - commercial	300	33,600	37.6	301.1	\$60,000	\$199.27
HE Clothes Washer - multifamily	150	8,400	9.4	112.9	\$30,000	\$265.70
<b>Totals</b>		142,650	159.8	3,232.60	\$415,000	\$128.38

Savings Assumptions:

*ULFT Cat. 1: 50.7 gallons/day, 25 year economic life*

*ULFT Cat. 2: 24.6 gallons/day, 25 year economic life*

*Cmcl Washer: 8 loads/day, 14 gallons/load, 8 year economic life*

*MF Washer: 5 loads/day, 14 gallons/load, 12 year economic life*

CALFED's funding of this program recognizes the value and potential of device rebate programs that have produced significant water savings over the last decade. CALFED funding will be strictly limited to increasing rebates for the installation of approved devices; administrative and other costs are borne by other program partners. CALFED funding can be immediately applied. Higher rebate levels increase program participation, generating immediate water savings.

Department funding is primarily in areas of the program for which CALFED funding is not sought. This strategy is being pursued to broaden the appeal and applicability of the program to a larger customer base. The Department is encouraging all eligible customers to participate.

And added benefit of CALFED funding will be the program participation data that will allow the Department and other water agencies throughout the state to better assess the impact of varying levels of device rebates, identify device rebate "trigger" levels and adjust individual rebate program accordingly. This affords direct, long-term water conservation benefits at the local, regional, and state levels.





# **Thomas L. Gackstetter**

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## **Professional Experience**

### **City of Los Angeles Department of Water and Power** (Sept. 1994 to Present)

#### **Current Position: Water Conservation Manager**

- Management of staff in the implementation of conservation programs, provision of conservation information and overall customer service.
- Water conservation program design, development and implementation for the City of Los Angeles, management and oversight of \$10 million annual budget.
- Development and implementation of the Los Angeles Department of Water and Power Supplemental Purchase Specification for ultra-low-flush toilets.
- Resolution of customer disputes regarding water conservation program offerings.
- Contract work bid solicitations, contract negotiation and management, contractor oversight.
- Liaison to other California water agencies and state/federal agencies.
- Member of California Urban Water Conservation Council's Executive Committee

### **City of Los Angeles Department of Water and Power** (Jan. 1989 to Sept. 1994)

#### **Position: Demand-Side Management Planner**

- Energy efficiency program design and development; including customer market research (surveys, interviews, focus groups), program policy and guideline development, consensus building, and program implementation.
- Liaison to other City departments, State regulatory agencies, and other electric utilities.
- Account Executive for large energy customers (March, 1989 to July, 1989)

### **City of Los Angeles Department of Transportation** (July 1981 to Jan. 1989)

#### **Position: Traffic Signal Electrician**

- Installation, maintenance and repair of traffic signal systems and equipment.
- Maintenance and enhancement of traffic signal equipment database.

### **City of Los Angeles Department of Building and Safety** (Aug. 1977 to July 1981)

#### **Position: Electrical Equipment Tester**

- Ensure electrical equipment conformance to applicable Underwriters Laboratories Standards, Los Angeles Electrical Code, and Electrical Testing Laboratory (ETL) requirements. All electrical equipment sold and/or installed in the City of Los Angeles required approval by the City's ETL or by Underwriters Laboratories.

## **Education**

### **California State University, Fullerton, Fullerton, CA** (1982 to 1986) **Bachelor of Arts – Business Administration [Finance]**